WHAT IS CLAIMED IS:

1. A method of inhibiting conversion of non-neoplastic ovarian epithelial cells to neoplastic cells comprising administering to a female subject an effective amount of a Vitamin D compound.

2. The method of claim 1 wherein Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1,25-dihydroxyvitamin D_3/kg of body weight.

3. The method of claim 2 wherein Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1,25-dihydroxyvitamin D_3 of body weight.

4. The method of claim 1 wherein the Vitamin D compound is 1,25-dihydroxyvitamin D_3.

5. The method of claim 1 comprising concurrent administration of a progestin product.

6. The method of claim 1 further comprising concurrent administration of a Vitamin A metabolite.

7. The method of claim 6 wherein the Vitamin A metabolite is retinoic acid.

8. The method of claim 1 further comprising concurrent administration of dexamethasone.

9. The method of claim 1 which includes first determining that such female subject does not display signs of ovarian cancer.

10. The method of claim 1 wherein the female subject is at high risk of developing ovarian cancer.

11. The method of claim 1 wherein said non-neoplastic cells are dysplastic cells.

12. A method of increasing apoptosis in non-neoplastic ovarian epithelial cells of a female subject comprising administering to a female subject an amount of a Vitamin D compound in an amount effective to induce apoptosis in non-neoplastic ovarian epithelial cells of the female subject.

13. The method of claim 12 wherein Vitamin D compound is administered at a dosage equivalent of from 0.0001 to 1.0 mg 1,25-dihydroxyvitamin D_3/kg of body weight.

14. The method of claim 13 wherein Vitamin D compound is administered at a dosage equivalent of from 0.005 to 0.1 mg/kg 1,25-dihydroxyvitamin D_3 of body weight.

15. The method of claim 12 wherein the Vitamin D compound is 1,25-dihydroxyvitamin D_3.

16. The method of claim 12 comprising concurrent administration of a progestin product.

17. The method of claim 16 wherein the progestin product is administered at a dosage less than or equal to a dosage equivalent to 10.0 mg of norethindrone.

18. The method of claim 16 wherein the progestin product is administered at a dosage less than or equal to a dosage equivalent to 1.0 mg of norethindrone.

19. The method of claim 18 wherein the progestin product is administered at a dosage less than or equal to a dosage equivalent to 0.2 mg of norethindrone.

20. The method of claim 12 further comprising concurrent administration of a Vitamin A metabolite.

21. The method of claim 20 wherein the Vitamin A metabolite is retinoic acid.

22. The method of claim 12 further comprising concurrent administration of dexamethasone.

23. The method of claim 12 wherein the female subject is at high risk of developing ovarian cancer.

24. The method of claim 12 wherein said non-neoplastic cells are dysplastic cells.

25. A pharmaceutical composition for inhibiting the conversion of non-neoplastic ovarian epithelial cells to neoplastic cells comprising a Vitamin D compound and a hormone product.

26. The pharmaceutical composition of claim 25 wherein said hormone is a progestin product.

27. The pharmaceutical composition of claim 26 wherein the Vitamin D compound is present at a dosage equivalent of from 0.0001 to 1.0 mg 1,25-dihydroxyvitamin D_3/kg of body weight and wherein the progestin product is present at a dosage less than or equal to a dosage equivalent to 10.0 mg of norethindrone and wherein said composition is a single unit dosage.

28. The pharmaceutical composition of claim 27 wherein the Vitamin D compound is present at a dosage equivalent of from 0.005 to 0.1 mg 1,25-dihydroxyvitamin D_3/kg of body weight and wherein the progestin product is present at a dosage less than or equal to a dosage equivalent to 1.0 mg of norethindrone.

29. The pharmaceutical composition of claim 25 wherein said hormone product is effective to provide contraceptive protection and wherein said composition is a single unit dosage.

30. The pharmaceutical composition of claim 29 wherein said hormone product comprises estrogen and progestin.

31. The pharmaceutical composition of claim 29 wherein said hormone product compound comprises estrogen.

32. The pharmaceutical composition of claim 25 wherein said hormone product is effective for hormonal replacement in post-menopausal women and said composition is a single unit dosage.

33. The pharmaceutical composition of claim 32 wherein said hormone product comprises estrogen.

34. The pharmaceutical composition of claim 32 wherein said hormone product includes estrogen and progestin.